CLAIMS

1. Superconductive inductive component comprising at least two terminals cooperating with a stack (E) of thin layers of alternately an electrically insulating material (C2) and a superconductive material (C1), and comprising tuning means (M11, MA2) producing a resistive connection between at least two of these superconductive layers (C1, C1i).

2. Component according to claim 1, characterized in that this stack (E) is positioned on a superconductive track (LS).

3. Component according to one of claims 1 or 2, characterized in that a connection between two superconductive layers connected by the tuning means has more or less uniform resistance in the stack.

4. Component according to one of claims 1 or 2, characterized in that a connection between two superconductive layers connected by the tuning means has a variable resistance within the stack.

5. Component according to one of the preceding claims, characterized in that the tuning means (MA1, MA2) comprise at least one substance applied to all or part of the section of the stack so as to produce a resistive connection between at least two superconductive layers.

6. Component according to claim 5, characterized in that the tuning means (MA1) have resistance characteristics which vary as a function of a physical or chemical variable, termed a control variable, specific to the environment of the component.

7. Component according to one of claims 5 to 6, characterized in that the tuning means (MA2) have a resistance controlled by an exposure or a variation of exposure to a light radiation (ME).

8. Component according to one of claims 5 to 7, characterized in that the tuning means (MA1) have a resistance controlled by a variation of temperature.

9. Component according to one of claims 5 to 8, characterized in that the tuning means (MA1) have a resistance controlled by an exposure or a variation of exposure to a magnetic field.

10. Component according to one of claims 5 to 9, characterized in that the tuning means (MA1) have a resistance controlled by an exposure or a variation of exposure to an electric field.

11. Component according to one of claims 5 to 10, characterized in that the tuning means (MA1, MA2) comprise a compound constituted by a polymer including metal particles.

12. Component according to one of the preceding claims, characterized in that the tuning means comprise means for controlling the resistance of at least one connection between two superconductive layers (C1, C1i) connected by these tuning means.

13. Component according to claim 12, characterized in that the control means include an electric or electronic circuit (CXi, CR) for controlling the electrical resistivity or resistance between at least two superconductive layers connected by the tuning device.

14. Electronic device including a superconductive inductive component comprising at least two terminals cooperating with a stack of thin layers of alternately an electrically insulating material and a superconductive material, and comprising tuning means producing a resistive connection between at least two of these superconductive layers.

15. Device according to claim 14, providing an optoelectronic transducer function.

16. Device according to claim 14, characterized in that it also comprises a capacitive component and provides a delay line function.

17. Device according to one of claims 14 to 16, characterized in that it produces at least one antenna including an inductive superconductive component.

18. Device according to one of claims 16 or 17, implemented in a phase shift radar device comprising a plurality of antennae each comprising an electronic circuit including at least one delay line, this delay line being arranged such that each of said antennae transmits or receives a signal the phase of which is shifted relative to that of the neighbouring antennae.

19. Device according to one of claims 17 or 18, implemented in a medical imaging device comprising at least one antenna including a superconductive inductive component the tuning means of which enable said antenna to be tuned.

20. Method for the production of a superconductive inductive component with a determined inductance value, characterized in that it comprises a phase of depositing a stack of alternately superconductive and insulating thin layers on a substrate, followed by a phase of depositing on all or part of the section of this stack at least one tuning layer with a material which produces between a plurality of these superconductive layers an electrical connection with a determined resistance, selected according to said inductance value.

21. Method for the production of a superconductive inductive component having controllable inductance characteristics, characterized in that it comprises a phase of depositing a stack of alternately superconductive and insulating thin layers on a substrate, followed by a phase of depositing on all or part of the section of this stack at least one tuning layer, producing between a plurality of these superconductive layers an electrical connection with a resistance varying as a function of a physical or chemical variable of the environment of this tuning layer.

22. Method according to one of claims 20 or 21, characterized in that, after the phase of depositing a stack, the component has a so-called intermediate inductance value, and in that the phase of depositing the tuning layer enables a reduction of the inductance of the component relative to its intermediate inductance.